SUBJECT INDEX

Accelerated corrosion, 1139 Acetonitrile-water mixtures, 2317

Acid corrosion, 2303 Acid inhibition, 1205 Acid media, 2129

Acid solutions, 351, 1205, 1333, 1955

Acoustic emission, 1175

Activation, 1419 Adherence, 1921 Adsorption, 789 AES, 1051, 1257 AFM, 477, 1871 Al 2024, 421 Al depletion, 1921

Alkaline conditions, 2229 Alkaline corrosion, 759

Alloy, 477, 1095, 1333, 1849, 1871, 2229

Alloys, 989, 1599, 1791

Alumina, 1089, 1835, 1945, 1971

Aluminium, 653, 709, 805, 885, 1079, 1323, 1447, 1599, 1743, 1835, 1945

Aluminium alloys, 291, 709, 1475 Aluminium matrix composites, 529

Aluminum, 477, 2229

Aluzink, 2229

Ammonium chloride, 669

Amorphous structures, 1095, 1849

Anions, 653 Anodic, 1971

Anodic dissolution, 773, 2303

Anodic films, 747, 759, 1599, 1945, 2053, 2083

Anodic oxidation, 1089 Anodic oxides, 1467

Anodizing, 291, 1599, 1835, 1945

Area reduction, 1119

Aromatic azole-type compounds, 105

Atmospheric corrosion, 141, 1529, 1715, 2001

Auger electron spectroscopy, 1585

Autophoretic coating, 1633

AZ91D, 249

B weight loss, 685 Barrier, 2053 Blackening, 2229 Boiling crevice model, 2165, 2191 Boiling water reactors, 2267 Brass, 1529

¹³C and ¹H NMR, 105 A516 Carbon steel, 1245

Cathodic disbonding, 580, 599

Cathodic protection, 229, 1165, 2099

Caustic, 805 Ceramic, 1403 Ceria, 1703

Cerium, 1791 Channel flow double electrode, 1419

Chloride, 869, 1835, 2001 Chromium, 773, 1419

Co, 1731

Cobalt, 1377, 1665, 1791

Conducting polymeric composites, 1165

Contact electric resistance, 1557 Conversion electron Mössbauer

spectroscopy, 1585

Copper, 463, 685, 919, 1051, 1205, 1273, 1359, 1529, 1665, 1899, 1955, 1987

Corrosion, 249, 669, 709, 885, 1687, 2075

Corrosion behaviour, 529 Corrosion fatigue, 1067

Corrosion in organic solvents, 2317

Corrosion inhibition, 685, 709 Corrosion inhibitor, 229, 1769 Corrosion inhibitors, 105, 789 Corrosion monitoring, 2129

Corrosion potential, 547 Corrosion products, 2229

Corrosion rate, 1497, 1515 Coupled environment fracture model, 2165,

2191

Coupons, 1687

Crack growth rate, 2267 Crack initiation, 1031 Crevice corrosion, 351 Critical stress, 1031

Cu alloy, 1089

Cyclic voltammetry, 463, 759, 1447, 1585, 1899, 2113

De-adhesion, 547 Deformation, 1119

Delamination, 547, 580, 599

Diecasting, 249
Diffusion barriers, 1431
Directionally-solidified alloys, 902
Dislocation emission, 699
Dissolution, 2113
Dissolution and passivation of iron, 2317
Donnan-potential, 547
Duplex stainless steels, 959

Effects of passivators, 2317 Effects of strain, 203 EIS, 57, 141, 275, 1165, 1359, 1391, 1447, 1539, 1557 Electrochemical impedance spectroscopy (EIS), 885 Electrochemical impedance spectroscopy, 789, 2113 Electrochemical methods, 1497 Electrochemical noise, 1245 Electrochemical parameters, 2075 Electrochemical Quartz Crystal Microbalance, 2143 Electrode capacitance, 1245 Electrodeposited films, 1987 Electrodeposition, 729 Electrolytic corrosion, 2099, 2213 EPR test, 1305 Exposure, 1119 Exposure time, 2001

Flaws, 1945 Fracture strain, 1119

Galvanized steel, 1539 Galvanostatic, 747 Goethite, 1687 Grain boundary, 1703

HCl, 1273
Heterogeneous electrochemistry, 229
High temperature corrosion, 1391
High-temperature oxidation, 729
Hydrogen, 805
Hydrogen absorption, 1067, 2251
Hydrogen embrittlement, 87, 1037, 2031
Hydrogen permeation, 203
Hydrogen sulfide, 773

Imidazoline derivative, 1911 a.c. impedance spectroscopy, 653 Impedance spectroscopy, 709 Implant materials, 1175 Incubation, 1245 Inhibition, 1323 Inhibition efficiency, 1911
Inhibitors, 1743
Initiation, 1245
Intergranular corrosion, 421
Intermetalics, 1743
Intermetallic, 1475
Intermetallics, 421
Ion migration, 1835
IR elimination, 2213
Iron, 747, 759, 989, 1497, 1515, 1715, 2083, 2129, 2303, 2353
Iron carbonate, 1231
Iron-chromium alloy, 1557
Iron-Chromium Alloy, 2143
Iron-polymer interface, 580, 599

Kelvinprobe, 547

Lepidocrocite, 1687 LME, 699 Localised corrosion, 229 Low alloy steel, 57, 203

Magnesium alloys, 249 Magnetic, 1687 Manganese, 2053 Mathematical methods, 2129 Measurement, 1911 Measurement of evolved hydrogen, 1323 Metal matrix composites, 1185, 1377 Metal-polymer interface, 547 Metastability, 959 Microalloyed steels, 1037 Microstructure, 249, 529 Migration, 1971 Mild steel, 789, 1231, 1391, 1529 Molten carbonate, 1497, 1515 Molybdate ions, 1289 Molybdenum, 869 Mössbauer spectroscopy, 1665 Multiphase alloys, 902

NaCl solutions, 885 Near field microscopy, 869 Neural networks, 2001 Neutral inhibition, 1987 Ni/MHx battery, 1347 NiAl-clad TiAl-based intermetallics, 1431 Nickel, 351, 463, 729, 1051 Nickel chloride, 2075 Nickel oxide, 729, 1703 Nitride coatings, 1585 ODS alloys, 1921 Organic coating evaluation, 229 Organic coatings, 141 Organic inhibitors, 1359 Oxidation, 902, 989, 1231, 1731, 1791, 1921 Oxidation protection, 1431

Paint coatings, 1539 Parabolic rate law, 1431 Passivation, 709 Passive film, 275, 869 Passive films, 351, 477, 1095, 1231, 1257, 1849, 1899, 1977, 2083 Passivity, 179, 275, 747, 759, 1743, 1871, 2143 Phenylthiourea, 321 Pipeline steels, 1037 Pit growth charge, 1245 Pitting, 1639, 1743 Pitting corrosion, 179, 421, 463, 477, 959, 1185, 1245, 1447, 1899, 2083 Pitting potential, 1175 Polarisation, 179, 685, 1257, 1377 Polarization, 57, 529, 1185, 1205, 1347, 1391, 1403, 1715, 1955, 2251, 2303, 2353 Polarization resistance, 2129 Polymer coatings, 57, 1715 Polymer-coatings, 547, 580, 599 Polymer deposition, 1633 Porosity index, 1585 Potential and current fluctuations, 1245 Potential parameters, 351 Potentiodynamic polarisation, 1165 Potentiostatic, 747, 1185 Potentiostatic, Polarization, 1987

Quantum chemical study, 1769 Quantum chemistry, 1911, 2303

Pure iron, 2113

Raman spectroscopy, 685
Reaction sequence, 1139
Reactive element effect, 1703
Reactive-element effect, 902
Repassivation, 1639
Retardation effects, 2031
RRDE, 1557
Rust, 1665, 2229
Rutherford backscattering spectroscopy, 291

Salt crust, 1289 Scale morphology, 1921 Scanning Kelvinprobe, 580, 599 SCC, 1289 Schiff bases, 1273, 1769

SEM, 87, 1185, 1377, 1403, 1475 SEM/EDS, 2229 Sensitization, 1305 Silanising, 885 Silver, 919 Slow strain rate, 1079 Sodium, 2075 Sodium chloride, 1769 Sodium nitrite, 1031 Sodium thiosulfate, 669 Sputtered films, 1095, 1849, 1871 SSRT, 853, 1175 Stainless, 853 Stainless steel, 87, 275, 321, 669, 1067, 1257, 1347, 1497, 1515, 1639, 2251 316L Stainless steel, 1175 Steam generator corrosion, 2165, 2191 Steel, 141, 179, 1665, 2001 Strauss test, 1305 Stray currents, 2099, 2213 Stress corrosion, 853, 1079 Stress corrosion cracking, 2267 Sulfidation, 669, 989, 1791 Sulfide stress corrosion cracking, 1037 Sulfuric acid, 321, 773 Sulphidation, 919 Sulphur dioxide, 2001 Superparamagnetic, 1687 Surface analysis, 580, 1515 Synthesis, 1911

TEM, 699 Temperature, 2001 Texture, 729, 1703 Thermal oxides, 1467 Thiourea, 321 α-Ti, 699 Ti, 2031 Titanium, 1333, 1871 TOW, 2001 TR infrared spectroscopy (FT-IR), 885 Transmission electron microscopy, 291 Transpassive dissolution through 2D nucleation and growth of an oxide film, 2317 Transpassivity, 1557 Triazole, 789 Tungsten carbide, 1377 Two-phase alloys, 919

UTS, 1119

VPS-cladding, 1431

Weight loss, 1333, 1977 Wet storage, 2229 White cast iron, 2113 Wire beam electrode, 229

X-ray photoelectron-spectroscopy (XPS), 885 XPS, 57, 275, 1051, 1095, 1231, 1715, 1849, 1977, 2143, 2229 XRD, 1391, 1529, 1899, 2229

Y, 1731 Yttrium, 989

ZEBRA battery, 2075 Zinc, 141, 1323, 2001, 2229 Zinc end products, 1139

AUTHOR INDEX

Abdulsalam, M. I. 351 Ahn, S.-H. 653 Akiyama, E. 477, 1095, 1849, 1871 Al-Kharafi, F. M. 709 Albarran, J. L. 1037 Amaral, S. T. 747, 759 Ammeloot, F. 105 Aramaki, K. 57, 1715 Asami, K. 477, 1095, 1849, 1871 Atrens, A. 249 Augustsson, P.-E. 2229 Aydin, A. 1175 Azambuja, D. S. 2083

Baba, H. 1987 Badawy, W. A. 709 Balova, S. 1633 Barbucci, A. 463 Barrena, M. I. 529 Beccaria, A. M. 885 Beche, E. 1051 Behm, R. J. 35 Bell, T. 1257 Ben Bachir, A. 501 Bentiss, F. 789 Bergmann, H. 2113 Berjoan, R. 1051 Bessone, J. B. 1447 Betova, I. 1557 Bloeck, M. 1475 Bojinov, M. 1557 Bottle, S. E. 685 Bouayed, M. 501 Bouzek, K. 2113 Bradshaw, R. W. 1119 Bremner, D. H. 2317 Brown, G. M. 1783, 1835, 1971 Brunoro, G. 197, 1205, 1217 Bucci, R. 197 Burgess, A. E. 2317 Burstein, G. T. 117 Burstein, T. 2073

Cabrini, M. 203 Cai, J. 2001 Cakir, A. 1175 Çakir, A. F. 1289 Cansever, N. 1289 Castello, P. 901, 919 Cerisola, G. 463 Chambaudet, A. 1051 Chan, S. L. I. 1347 Chang, H. 669 Chattoraj, I. 1 Chen, S. 773, 1273 Chen, S. H. 321, 1769 Chen, S. Y. 1347 Chen, X. 321 Chen, Z. 1911 Cheng, X. 773 Cheng, X. L. 321 Cheng, Y. F. 1245 Chiaruttini, L. 885 Christov, M. 1633 Chu, W. 699 Chuang, H. J. 1347 Cicileo, G. P. 1359 Cid, M. 1615 Colin, S. 1051 Conde, A. 1079 Cook, D. C. 1687 Corfias, C. 1539 Corvo, F. 75 Cottam, C. A. 1529 Cottis, R. A. 2001 Couffignal, R. 105 Crossland, A. C. 1945, 2053 Cwiek, J. 1067 Czerwinski, F. 729, 1703

Da Cunha Belo, M. 17 de Damborenea, J. J. 1079 Dargusch, M. 249 Darowicki, K. 1165 Das, S. 1 De Laet, J. 213 De Salazar, J. M. G. 529 Dehri, I. 141 Delblanc-Bauer, A. 275 Desjardins, D. 869, 1067 Doche, M. L. 805 Duffó, G. S. 191 Durand, R. 805 Ebel, T. 35 El-Azab, A. S. 709 Elmorsi, M. A. 305, 2337 Emmony, D. C. 1529 Engelhardt, G. R. 2165, 2191, 2267

Fabricius, G. 1557 Farné, G. 463 Faucheu, J. 1139 Feng, Y. 829 Ferreira, M. G. S. 17 Fiaud, C. 105 Flis, J. 1257 Fogagnolo, M. 1205 Fonsati, M. 1217 Frignani, A. 1205, 1217 Fu, G. Y. 1791

Galvele, J. R. 191 Garfias-Mesias, L. F. 959 Gesmundo, F. 901, 919, 989, 1791 Goods, S. H. 1119 Gorse, D. 1031 Graham, M. J. 1467 Guillaumin, V. 421 Guo, X.-P. 1391

Habazaki, H. 213, 291, 477, 1089, 1095, 1599, 1783, 1849, 1871, 1945, 1971, 2053 Hanžel, D. 1585 Hardie, D. 155 Haruna, T. 853 Hashimoto, K. 477, 1095, 1849, 1871 Hassanein, A. M. 2337 Hazarabedian, A. 87 He, W. 2229 Hermas, A. A. 2251 Heuer, J. K. 1231 Hihara, L. H. 1403 Hihn, J.-Y. 1139 Hofmann, K. 599 Hollrigl, G. 1475 Holzle, L. R. 2083 Hope, G. A. 1377 Hornez, J. C. 789 Howard, R. L. 141 Hsieh, A. K. 829 Hsu, I. C. 1431 Hsu, S. E. 1431 Hussey, R. J. 1467 Huynh, N. 685

Ishikawa, T. 1665 Itagaki, M. 1955 Iwane, A. 1403

Jackson, N. C. 1013 James, L. A. 373, 401 Janicki, S. 1165 Janosi, S. 1257 Janovec, J. 1305 Jargelius-Pettersson, R. F. A. 1639 Jolibois, H. 1051

Kamachi Mudali, U. 179
Kandor, K. 1665
Kautek, W. 1899
Kawashima, A. 477, 1095, 1849, 1871
Kim, S.-S. 653
Kinet, G. 1323
Kiourtsidis, G. E. 1185
Kobayashi, K. 1783, 1835, 1971
Kobotiatis, L. 941
Kodama, T. 1987
Kolozsvary, Z. 1257
Koroleva, E. V. 1475
Koutsoukos, P. G. 941
Kuo, H.-S. 669

Lacabanne, C. 1539 Lagrenee, M. 789 Laguzzi, G. 197 Laitinen, T. 1557 Lakatos-Varsanyi, M. 1585 Landolt, D. 2143 Le Beuze, A. 501 Lee, C. C. 439 Legris, A. 1031 Lei, S. 773, 1273 Lei, S. B. 1769 Leng, A. 547, 579, 599 Leygraf, C. 275, 2229 Li, F.-B. 2317 Li, S. 1273, 1911 Li, S. L. 1769 Li, X.-Y. 1095, 1849 Ligier, V. 1139 Lin, H. C. 2303 Lindbergh, G. 1497, 1515 Linter, B. R. 117 Liu, D. 1273 Liu, D. X. 1769 Liu, S. Z. 2303 Lopez, H. F. 1037 Lopez, N. 1615 Lu, H. 699

Luo, J. L. 741, 1245 Luppo, M. I. 87 Luvidi, L. 197 Lyon, S. B. 141, 2001

Ma, H. 773, 1273 Ma, H. Y. 321, 1769 Macdonald, D. D. 2165, 2191, 2267 Maffi, S. 203 Magnussen, O. M. 35 Malki, B. 1031 Mankowski, G. 421 Mankowski, J. 1257 Mansfeld, F. 439 Manzanedo, S. 529 Martinez, L. 1037 Matteazzi, P. 463 McCaffrey, J. P. 1467 Mehmood, M. 477, 1871 Mendoza, A. R. 75 Millett, P. J. 2165, 2191 Mitra, A. 1 Monteiro, M. J. 1731 Montemor, M. F. 17 Monticelli, C. 1205, 1217 Moon, S.-M. 653 Morad, M. S. 2251 Mori, T. 1955 Moriena, G. 625 Moshier, W. C. 373, 401 Mu, G. 1937 Müller, B. 1323 Müller, I. L. 747, 759 Muller, I. L. 2083 Muñoz, A. G. 1447 Mussati, G. 203

Nakazaki, H. 1665 Narowska, B. 1257 Niu, L. 773, 2303 Niu, Y. 919, 989, 1791 Notoya, T. 685 Novel-Cattin, F. 805 Nozawa, K. 57

Ogura, K. 2251 Oh, S. J. 1687 Okuwaki, A. 1977 Olive, J. M. 869, 1067 Oltra, R. 1419 Országová, J. 1305 Otieno-Alego, V. 685 Ouyang, S. 155 Ovejero-García, J. 87 Pan, J. 275
Pavlidou, E. G. 1185
Pebere, N. 941
Pébère, N. 1539
Peraldo Bicelli, L. 203
Piatnicki, C. M. S. 2083
Pickering, H. W. 351
Pouet, M. J. 105
Prakash, J. 2075
Puiggali, M. 1615
Pyun, S.-I. 653

Rabaâ, H. 501 Raicheff, R. 1557 Rameau, J. J. 805 Rao, K. R. M. 1 Razzini, G. 203 Redey, L. 2075 Reynders, B. 179 Riccieri, R. 463 Rizzo, F. C. 1731 Robin, A. 1333 Robinson, M. J. 1013 Rocchini, G. 2129, 2353 Rocheleau, R. E. 1403 Rosa, J. L. 1333 Rosales, B. 625 Rosales, B. M. 1359

Saario, T. 1557 Sahre, M. 1899 Saillard, Y.-Y. 501 Sandim, H. R. Z. 1333 Sanjuán, M. A. 335 Sathiyanarayanan, S. 1899 Scherer, J. 35 Schmuki, P. 1467 Schmutz, P. 2143 Schweinsberg, D. P. 685, 1377 Serebrinsky, S. A. 191 Seto, M. 1665 Shahid, M. 1323 Shibata, T. 853 Shimizu, K. 213, 291, 1089, 1599, 1783, 1835, 1945, 1971, 2053 Siládiová, V. 1305 Simonsson, D. 1497, 1515 Simes, A. M. P. 17 Siow, K. S. 829 Skeldon, P. 213, 291, 1089, 1599, 1783, 1835, 1945, 1971, 2053 Skoliano, S. M. 1185 Smith, C. J. E. 1945, 2053 Sokólski, W. 2099, 2213

- Song, G. 249 Sproule, G. I. 1467 Srhiri, A. 501 Stott, F. H. 901 Stratmann, M. 179, 547, 579, 599 Streckel, H. 547, 579, 599 Stubbins, J. F. 1231 Su, Y. 699 Sutter, E. M. M. 105 Sykes, J. M. 959 Szklarska-Smialowska, Z. 1743 Szpunar, J. A. 729, 1703
- Tachez, M. 1139 Takahiro, K. 213 Tan, Y.-J. 229 Tao, Y. 1467 Teo, W. K. 829 Thompson, G. E. 213, 291, 1089, 1475, 1599, 1783, 1835, 1945, 1971, 2053 Tommesani, L. 197, 1205 Tomoe, Y. 1391 Townsend, H. E. 1687 Traisnel, M. 789 Trueman, A. R. 1377 Tsai, W.-T. 669 Tuleja, S. 1305 Tuncell, S. 1175 Türker, M. 1921
- Ürgen, M. 1289 Urquidi-Macdonald, M. 2267 Varela, F. E. 1359 Vera, R. 625 Vignal, V. 869 Vilche, J. R. 1359 Vissers, D. R. 2075

Uchida, M. 1977

Ureña, A. 529

- Vogt, J.-B. 519 Voss, S. 1403
- Vuillemin, B. 1419

- Wallinder, D. 275 Wallinder, I. O. 2229 Wang, D. 1911 Wang, M. 1911 Wang, Y. 699 Wang, Y. G. 1769 Wasilewski, Z. R. 1467 Watanabe, K. 1955 Wéry, M. 1139 Wilmott, M. 1245 Wood, G. C. 213, 291, 1089, 1599, 1783, 1835, 1945, 1971 Wu, W. 989 Wu, W. T. 1731, 2303
- Xiao, H. 1911
- Yamaguchi, S. 213 Yan, L. J. 2303 Yan, R. 989 Yang, M. Z. 741 Yang, Q. 741 Yao, Z. 773 Yao, Z. M. 321 Yasukawa, A. 1665 Yen, S. K. 2031 Ying, Y. 1911 Yu, R. 321, 773, 1273, 1769
- Żakowski, K. 2099, 2213 Záhumenský, P. 1305 Zakroczymski, T. 1257 Zeng, C. L. 1731 Zhang, S. 853 Zhang, Y. S. 1817 Zhang, Z. 1403 Zhao, T. 1937 Zhilyaev, A. 1703 Zhou, X. 213, 291, 1089, 1599, 1945 Zhu, B. 1497, 1515 Zhu, X. M. 1817

